

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (previously presented) A method for controlling the configuration of elements of a telecommunications network comprising a plurality of nodes, the method comprising the steps of:

generating a model configuration of said elements comprising, for at least one function of each element subjected to control, a respective model of implementation of the function itself,

collecting, for each element subjected to control, at least one respective set of configuration data of the element itself,

verifying, for each element subjected to control and in the absence of interaction with the element itself correspondence between said at least one function as implemented on the basis of said at least one respective set of configuration data of the element and said model of implementation of the function itself included in said model configuration, and

performing the steps of generating a model configuration, collecting said at least one respective set of configuration data of the element and verifying said correspondence in relation with at least one of the group including:

an interfacing element between two nodes of said plurality, and

a plurality of respective sets of configuration data of said element, said plurality of respective sets of configuration data expressing respective different configuration states of the element.

2. (previously presented) The method as claimed in claim 1, further comprising the steps of:

simulating on the basis of said at least one set of configuration data of the element and in the absence of interaction with the element subjected to control the implementation of said at least one function by generating at least one respective outcome of implementation of the function itself through the element subjected to control, and

verifying correspondence between said at least one respective outcome of implementation obtained by simulation and the corresponding implementation model included in said model configuration.

3. (previously presented) The method as claimed in claim 1, further comprising the step of selecting said plurality of respective sets of configuration data as exhaustive representation of the configuration states allowed for said element.

4. (currently amended) The method as claimed in claim 1, further comprising the step of modifying the configuration data included in said at least one respective set of configuration data (~~.... CF_{k-1}, CF_k, CF_{k+1},....~~) of each element subjected to control in order to obtain the correspondence between the actual configuration of the element and said model configuration.

5. (currently amended) The method as claimed in claim 1, further comprising the step of selecting said model configuration as representative of at least one of the group including:

a set of configuration data meant to be identical on all homologous elements of the network in the cases of configuration control;

a set of expected ~~behaviours~~behaviors for an element in the case of functional analysis; and

a set of exhaustive behaviors of all elements able to be traversed in the case of simulation of a determined service throughout the network.

6. (previously presented) The method as claimed in claim 1, further comprising the step of providing a control management station for the generation of said model configuration.

7. (previously presented) The method as claimed in claim 1, further comprising the step of providing a plurality of control stations able to start the execution of said verifying step.

8. (previously presented) The method as claimed in claim 1 wherein at least one of said steps of generating, collecting, simulating, verifying and modifying is configured to be performed in a centralized position with respect to said elements subjected to control.

9. (previously presented) The method as claimed in claim 2 wherein said simulating step is performed on the basis of at least one respective set of analysis functions representative of a respective element model.

10. (previously presented) The method as claimed in claim 2 wherein said simulating step is conducted step-by-step.

11. (currently amended) A system for controlling the configuration of elements of a telecommunications network comprising a plurality of nodes, the system comprising:

a database containing a model configuration of the elements of said network and comprising

for at least one function of each element subjected to control a respective model of implementation of the function itself,

for each element subjected to control at least one respective set of configuration data of the element itself,

for each element subjected to control a verification module to verify in the absence of interaction with the element itself correspondence between said at least one function, as implemented on the basis of said at least one respective set of configuration data, and said model of implementation of the function itself included in said model configuration, and

a model configuration as well as a set of configuration data to allow the verification by said verification module in relation with an interfacing element between two nodes of said plurality or a plurality of respective sets of configuration data of said element, said plurality of respective sets of configuration data expressing respective different configuration states of the element.

12. (previously presented) The system as claimed in claim 11, further comprising:

a simulation module to simulate based on said at least one respective set of configuration data of the element and in the absence of interaction with the element subjected to control, the implementation of said at least one function and generating at least a respective outcome of implementation of the function itself by the element subjected to control, said verification module being configured to verify the correspondence between said at least one respective outcome of implementation obtained by simulation and the corresponding implementation model included in said model configuration.

13. (previously presented) The system as claimed in claim 11 wherein said verification module is configured to operate on a plurality of respective sets of data constituting an exhaustive representation of the allowed configuration states for said at least one element subjected to control.

14. (previously presented) The system as claimed in claim 11 wherein the system itself is configured to modify the data included in said at least one respective set of configuration data of each element subjected to control in order to obtain the correspondence between the actual configuration of the element and said model configuration.

15. (previously presented) The system as claimed in claim 11 wherein said database contains a model configuration representative of at least one of the group including:

a set of configuration data that it is required be identical on all the homologous elements of the network in the cases of configuration controls;

a set of expected behaviors for an element in the case of functional analyses; and

a set of exhaustive behaviors of all elements that can be traversed in the case of simulation of a determined service throughout the network.

16. (previously presented) The system as claimed in claim 11, further comprising

a control management station for generating said model configuration.

17. (previously presented) The system as claimed in claim 11, further comprising a plurality of control stations able to drive said verification module.
18. (previously presented) The system as claimed in claim 11 wherein said database or said verification module is located in a centralized position relative to said elements subjected to control.
19. (previously presented) The system as claimed in claim 12 wherein said simulation module comprises a respective set of function for the simulation of respective functions.
20. (previously presented) The system as claimed in claim 12 wherein said simulation module operates according to step-by-step simulation modes.
21. (currently amended) A computer readable medium having computer-executable instructions stored thereon which, when executed by ~~program-product able to be directly loaded into the internal memory of at least one digital computer, and comprising portions of software code to~~ implement the method as claimed in claim 1.